

# Web Mapping - Ramsey County Construction Tool

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GIS 5574: Web GIS and Services



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### **Resilient Communities Project**

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The project on which this presentation is based was completed in collaboration with Ramsey County as part of the 2018–2019 Resilient Communities Project (RCP) partnership. RCP is a program at the University of Minnesota’s Center for Urban and Regional Affairs (CURA) that connects University faculty and students with Minnesota communities to address strategic projects that advance local resilience and sustainability.

The contents of this report represent the views of the authors, and do not necessarily reflect those of RCP, CURA, the Regents of the University of Minnesota, or Ramsey County.




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# Background

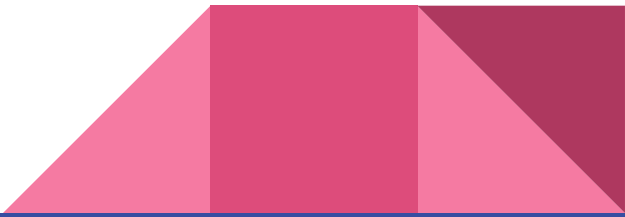
- A single web mapping application to display Ramsey County's five-year plans
- All proposed projects shown on one platform
- Information updated simultaneously
- Increase transparency of government planning to the public



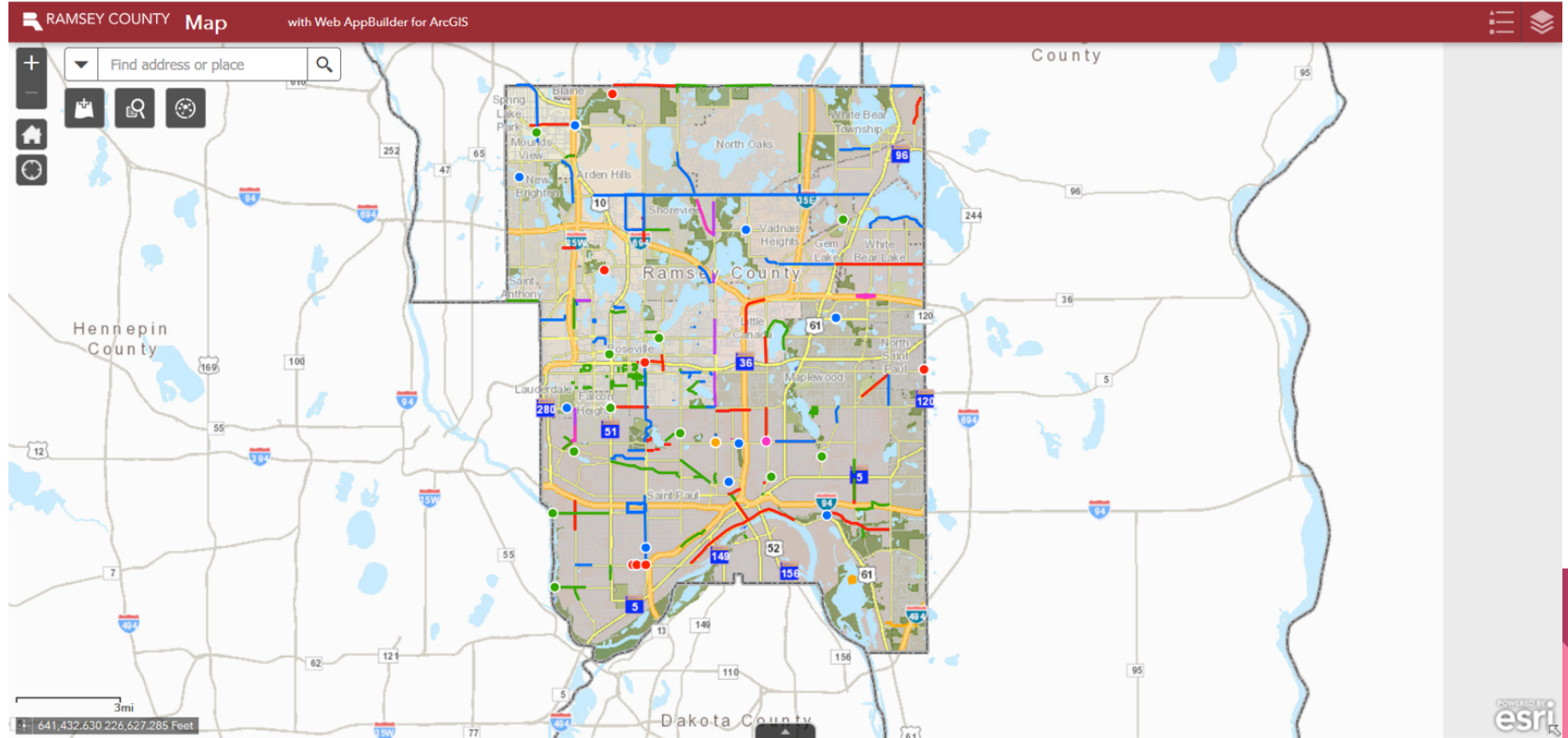
# Scoping

- A final data model as the project's goal
  - Projects feature service included in the County's ArcGIS Online website
  - Recommendations on how the County can display the project data
  - An Esri-based web application hosted within the county's ArcGIS Online site
  - Recommendations on how to utilize the data effectively
- 

# Methods

- Leveraging the existing data model as a base
  - Utilizing the County's Enterprise geodatabase for further application
  - Publishing a secure ArcGIS Server service for data editing
  - Employing ArcGIS Online as the platform for the web application
  - Developing a web application to raise data transfer efficiency
  - Delivering a final documentation as the application proxy
  - Presenting ways to visually represent conflicts on the map
- 

# Results - Visualization



# Results - Query Widget

Query

×

Tasks

Results

PLAN\_ConstructionLine

PLAN\_ConstructionPoint

Query

×

Tasks

Results

←

PLAN\_ConstructionLine

Query criteria

Project Year is

2017

ProjectOwner is

City of Roseville

**Web application link:**

<https://ramseygis.maps.arcgis.com/apps/webappviewer/index.html?id=7a422ded78264ebfa5bb4192f8b31095>

# Results (cont.)

Tasks

Results

Publish ArcGIS

displayed features:37/37

Server Service

Gluek Ln, 2017 PMP

OBJECTID10

Project TypeConstruction

NameGluek Ln, 2017 PMP

DescriptionMill and Overlay

Primary RoadGluek Ln

FromFerris Ln

ToGluek Ln

Project Year2017

Project StartSpring

Duration4 weeks

CommunitiesRoseville

ImpactLocal Traffic Impacts Only

Project ContactLuke Sandstrom

Contact Phone651-792-7048

StatusPlanned

More Info[More info](#)

Email Updates

ProjectID

A map of a suburban area in Roseville, Minnesota. The map shows a network of roads including County Road B West, County Road C West, County Road B2 West, and Hamline Avenue North. Several lakes are visible, including Langton Lake, Oasis Lake, Little Lake Johanna, Little Lake Josephine, and Willow Pond. A green dot marks the project location at the intersection of County Road B2 West and Hamline Avenue North. Red lines and shapes on the map indicate the project's impact on local traffic.

Web application link:

<https://ramseygis.maps.arcgis.com/apps/webappviewer/index.html?id=7a422ded78264ebfa5bb4192f8b3109>



# Results -Add Data Widget

Add Data

Search

URL

File

My Organization


Search...

Q

Within map


Type

Relevance




Cities  
Feature Service by RCGISAdmin

ADDDETAILS




ConstructionDataRoad\_view  
Feature Service by christina.ulrich@co.ramsey.mn.us\_RamseyGIS

ADDDETAILS




ConstructionDataPoint\_view  
Feature Service by christina.ulrich@co.ramsey.mn.us\_RamseyGIS

ADDDETAILS



RamseyMask  
Feature Service by christina.ulrich@co.ramsey.mn.us\_RamseyGIS

ADDDETAILS



Parcel Points  
Feature Service by RCGISAdmin

ADDDETAILS

<< < 1 > 88 Items

LAYERS

# Lessons Learned

- The scoping of the project can be time consuming
- ESRI Web Application Builder is very intuitive
- Issues of basemap display in ArcGIS Online
- Clear and well coordinated goals are helpful
- Know your audience



Questions?

